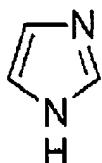


REMARKS

In response to the action, Applicant has amended claims 1, 5 and 6 and cancelled claims 9 and 10. Applicant respectfully requests reconsideration in view of the amendments and the following remarks.

Applicant amended claims 1 and 5 to abrasive particle-free formulations. Originally filed claim 6 and the specification at paragraph 43, lines 1 to 3 provide a basis for the amendment. In addition, Applicant amended claim 6 to a pH range of 7 to 12. The specification at paragraph 38, lines 2 and 3 provides a basis for the limitation. Applicant respectfully submits that the amended claims enter no new matter.

The action rejects claims 1 to 6 and 8 under 35 U.S.C. § 102(e) for being anticipated by Wang et al. The Wang et al. reference does disclose cyclic compounds such as imidazole, benzotriazole, benzimidazole and benzothiazole for forming passivation layers. For example, imidazole has a structure as follows:

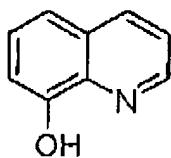


These azoles do not have or suggest the claimed imine or hydrazine structures. Thus since azole structures do not disclose or suggest the claimed imine or hydrazine structure, Wang et al. do not anticipate the claims.

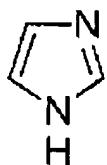
The action rejects claims 1 to 6 and 8 under 35 U.S.C. § 102(b) for being anticipated by Lee (US Pat. No. 6,436,834). Lee discloses guanidine and other imine compounds for use in a TEOS removal slurry. The Lee patent at Col. 4, lines 2 to 7 a range of 0.1 to 30 weight percent abrasive. Furthermore, examples of Lee require relatively large amounts of abrasive (10 to 18

wt%). Applicant has discovered that imine and hydrazine compounds can function in abrasive-free polishing solutions to polish tantalum-containing barrier materials. Thus, since Lee fails to disclose the use of imine and hydrazine in abrasive-free polishing solutions to polish tantalum-containing barrier materials and teaches away by disclosing accelerated TEOS dielectric removal, Lee does not anticipate or suggest claims 1 to 6 and 8, as amended to abrasive-free polishing solutions.

The action rejects claims 1 to 6 and 8 under 35 U.S.C. § 102(b) for being anticipated by Avanzino (US Pat. No. 6,350,687). The Avanzino reference teaches the use of copper corrosion inhibitors including 8-hydroxyquinoline and imidazole. These compounds have structures as follows:



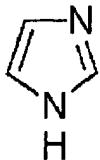
8-Hydroxyquinoline



Imidazole

These claimed corrosion inhibitors do not have or suggest the claimed imine or hydrazine structures. Thus since azole structures do not disclose or suggest the claimed imine or hydrazine structure, Avanzino does not anticipate the claims.

The action rejects claims 1 to 6 and 8 under 35 U.S.C. § 102(b) for being anticipated by Fang (US Pat. No. 6,805,812). The Fang reference does disclose cyclic compounds such as benzotriazole, triazole, benzimidazole, imidazole and benzothiazole for forming passivation layers. For example, imidazole has a structure as follows:



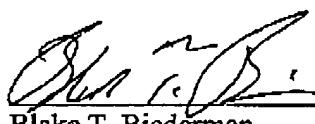
These azoles do not have or suggest the claimed imine or hydrazine structures. Thus since azole structures do not disclose or suggest the claimed imine or hydrazine structure, Fang does not anticipate the claims.

The action rejects claims 1 to 8 under 35 U.S.C. § 102(b) for being anticipated by Rothgery (US Pat. No. 4,479,917). Rothgery teach a composition for scavenging oxygen and inhibiting corrosion. Inhibiting corrosion teaches away from Applicant's claimed polishing solution. Thus, since Applicant claims an abrasive-free polishing solution and Rothgery teach an anti-corrosion formulation, the reference does not anticipate or suggest claims 1 to 8, as amended.

Applicant respectfully submits that the amended claims are in proper form for allowance and respectfully requests reconsideration. If a telephone call would expedite prosecution, please call me at the number listed below.

Respectfully submitted,

Dec 21, 2005  
Date

  
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